DIAGNOSIS OF *EPIPEDUS* SPINOLA AND REDESCRIPTION OF THE TYPE SPECIES, *E. HISTRIO* SPINOLA (HEMIPTERA: PENTATOMIDAE)

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Abstract. — The diagnostic characters of *Epipedus* Spinola, 1837, are enumerated and *Cala-gasma* Bergroth, 1914, synonymized with this genus. *Epipedus histrio* Spinola, 1837, type species by monotypy, is redescribed and a lectotype designated.

Epipedus Spinola, 1837, a neotropical genus in the tribe Pentatomini, has been an enigma. The original diagnosis became inadequate with the accrual over the years of other genera in the tribe; and the syntypes of *E. histrio* Spinola, the type species by monotypy, were not generally available for study until the Spinola collection of Hemiptera was transferred in 1979 to the Museo Regionale de Scienze Naturali di Torino. Through the kindness of A. Casale, a syntype of *E. histrio* was loaned to me. The genus is redefined and the species redescribed from this specimen.

Epipedus Spinola, 1837

Epipedus Spinola, 1837:314–315. (Type species *Epipedus histrio* Spinola, 1837, by monotypy.)

Calagasma Bergroth, 1914:432–433. NEW SYNONYMY. (Type species *Calagasma margarita* Bergroth, 1914, by monotypy.)

Diagnosis. Juga strongly reflexed along lateral margins, converging over tylus apically. Relative to width of head across eyes: interocular width $\frac{1}{2}$, distance across ocelli from lateral margin of one ocellus to lateral margin of other $\frac{2}{2}$, length of head from apex to ocelli $\frac{7}{10}$. Antennifers entirely visible from above; antennae 4-segmented; basal segment surpassing apex of head. Bucculae evanescent near base of head; first rostral segment extending slightly past bucculae.

Anterolateral margins of pronotum entire, strongly reflexed from obtuse humeri to small tooth at each anterolateral angle; collar along anterior pronotal margin defined by deep sulcus.

Scutellum subgibbose basally. Basal angles lacking foveae. Scutellar length subequal to basal width; width at distal end of frena about $\frac{1}{3}$ of basal width.

Prosternum slightly concave mesially, mesosternum weakly carinate, metasternum flat. Anterior propleural margins not produced. Each ostiolar sulcus spatulate, extending about ¹/₃ distance from mesial limit of ostiole to lateral margin of metapleuron.

Femora unarmed. Superior surface of tibiae rounded expecting apex may be flattened or broadly rounded.

Abdominal venter without mesial tubercle or spine at base.

Comments. Bergroth proposed *Calagasma* apparently because of a statement Spinola made, and one he did not make, in the diagnosis of *Epipedus*. Bergroth contrasted *Calagasma* with his concept of *Epipedus* thus: "Voisin du genre *Epipedus* Spin., mais bien distinct par la structure et la sculpture singuliere de l'escusson et par les tibias cylindriques, en dessus, nullement trigones." All Spinola wrote concerning the form of the scutellum was: "Ecusson triangular; extremite arrondie, ne depassant pas le quatrieme anneau dorsal." He did not mention the prominent basal tumescence, which Bergroth undoubtedly assumed was absent and cited as an important contrast between *Epipedus* and *Calagasma*. Spinola also wrote: "Tibias trigones." This statement is accurate only for the apices of all tibiae of *E. histrio*; the remainder of all tibiae of *C. margarita* are cylindrical. I do not believe that the differences between *Epipedus* histrio and *Calagasma margarita* are of more than specific value and therefore place *Calagasma* in the synonymy of *Epipedus*.

The type specimen of *Calagasma margarita* was not located. My concept of the species is based on Bergroth's detailed description.

In the American Museum of Natural History there is a female specimen, determined by Ruckes as *Calagasma margarita*, which conforms to the description of that species except that the posterior slope of the scutellar tumescence is punctate. In this specimen the apices of the front tibiae are flattened above and triangular. The remainder of the front tibiae is cylindrical as are all of the middle and hind tibiae. The former divergence from the description may represent intraspecific variation and the latter an oversight by Bergroth. Alternatively, this specimen may represent a third species of *Epipedus*.

Epipedus histrio Spinola, 1837

Epipedus histrio Spinola, 1837:315-316.

Redescription. Head mostly rufous; tylus black with rufous lateral margins and brownish yellow base; vertex brownish yellow, bordered on each side by black line curving toward eyes anteriorly. Punctation consisting of single row of punctures on each side of vertex; most punctures within black line, a few anterior to it where black line diverges toward eye. Tylus slightly longer than juga, appearing shorter when insect viewed dorsally because of strongly reflexed lateral margins of juga (Fig. 1); these margins slightly sinuous. Width of head across eyes 2.45 mm; length from apex to ocelli 1.95 mm; interocular width 1.25 mm; distance from outer margin of one ocellus to outer margin of other 1.05 mm. Antennal segments 1–4 about 0.8, 3.6, 2.6, 2.5 mm long; basal segment rufous, remaining segments brownish yellow with distal tenth of second and distal halves of third and fourth fuscous. Rostral segments 2–4 about 1.1, 7.5, 8.5 mm long; apex of rostrum reaching posterior limits of mesocoxae.

Pronotum brownish yellow; extensive rufous markings partially enclosed in black (Fig. 3). Row of punctures in sulcus behind collar continuing submarginally for short distance along anterolateral margins; V-shaped, sparsely punctate band of punctures divides pronotum transversely; pronotum elsewhere impunctate. Cicatrices obscure. Humeri little produced, obtusely angulate. Pronotal width 7.4 mm at humeri, mesial length 2.5 mm.



Figs. 1–4. *Epipedus histrio.* 1. General form, dorsal view. 2. Right corium. 3. Pronotum. (Rufous areas of pronotum and corium indicated by stippling.) 4. Genital plates; basal plates (bp) slightly opened.

Scutellum mostly rufous; brownish yellow macule covering most of mesial half of scutellar base impunctate; base of scutellum on each side, macule and border along most of frenal margins brownish yellow, much of this border outlined in black. Low, median carina extending from basal tumescence becoming obsolete before apex. Scutellum 4.8 mm wide at base, 1.6 mm wide at end of frena, 4.7 mm long.

Costal margin of each corium strongly reflexed basally; posterior margin sigmoid; costal angle acute, rounded (Fig. 2). Membrane slightly fumose with about 10 veins, extending beyond apex of abdomen. Endocorium brownish yellow, punctation black. Exocorium brownish yellow with extensive rufous suffusion (stippled area in figure). Narrow, black, mostly submarginal border along distal part of costal margin continues with diminished clarity around posterior corial submargin and extends short distance along claval suture. Large, impunctate or very sparsely punctate area mesad of R+M vein divided by large, black macule; proximal impunctate area triangular, brownish yellow; distal area very sparsely punctate, rufous (limit of these areas indicated by punctures and vein in figure); punctation in brownish yellow areas black, in rufous areas concolorous excepting small patch of black punctures between distal end of R+M vein and submarginal black line; basal area between costal margin and R+M vein somewhat scabrous, not distinctly punctate. Connexiva broadly exposed, immaculate.

Venter brownish yellow excepting femora apically, tibiae, tarsi and broad border along lateral margins of head rufous. All tibiae broadly, shallowly sulcate apically, otherwise cylindrical. Genital plates as in Figure 4.

Body widest across second visible segment of abdomen, 8.5 mm. Body length including membranes 12.2 mm.

Lectotype. Spinola based the genus and species *Epipedus histrio* on two female specimens that are still extant. However, one specimen, which I have not seen, lacks the head. The other specimen is reasonably intact but lacks the last segment of the left antenna, the right middle leg and the left hind leg. This specimen, now labeled "*Epipedus histrio* Spin., D. Buquet, Bresil, (cotype)," is designated lectotype.

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